EXHIBIT 3

UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA - WESTERN DIVISION

HONORABLE GEORGE H. WU, U.S. DISTRICT JUDGE

THE CALIFORNIA INSTITUTE OF
TECHNOLOGY,

                    Plaintiff,

       vs.   Case No. CV 16-3714-GW

BROADCOM LIMITED, et al,

                    Defendants.
_____/

                    REPORTER'S TRANSCRIPT OF
              JURY TRIAL - DAY 4 PM SESSION
                 FRIDAY, JANUARY 17, 2020
                        1:00 P.M.
                 LOS ANGELES, CALIFORNIA

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                    UNITED STATES DISTRICT COURT

03:17PM	1	THE COURT: Okay. Great.
	2	(JURY ENTERS COURTROOM AT 3:18 P.M.)
03:18PM	3	THE COURTROOM DEPUTY: You may be seated.
03:18PM	4	THE COURT: All right. Good afternoon again, ladies
03:18PM	5	and gentlemen. We will continue with the examination.
03:19PM	6	MR. JOHNSON: Thank you, Your Honor.
03:19PM	7	BY MR. JOHNSON:
03:19PM	8	Q Thus far, Dr. Shoemake, we've been talking about the
03:19PM	9	infringement issues in this case, right?
03:19PM	10	A Correct.
03:19PM	11	Q Does that conclude your opinions with respect to the
03:19PM	12	infringement issues in this case?
03:19PM	13	A It does. I have shown that the five claims at issue are
03:19PM	14	infringed by the accused products.
03:19PM	15	Q So I now need to switch gears a little bit and ask you
03:19PM	16	some technical questions that are related to the damages issues
03:19PM	17	in this case.
03:19PM	18	And let me start by asking you, are you familiar with
03:19PM	19	something that Broadcom refers to as the direct encoder?
03:19PM	20	A I am.
03:19PM	21	Q And have you seen evidence that Broadcom has considered
03:19PM	22	using what it calls a direct encoder?
03:19PM	23	A I have.
03:19PM	24	Q And what evidence have you seen and what is it exactly?
03:19PM	25	A So I have seen evidence that indicates that Broadcom has

03:19PM	1	tried to design something called a direct encoder. That is a
03:19PM	2	type of encoder that takes the information bits, and instead of
03:19PM	3	using a low complexity two-step process, like the Caltech's
03:19PM	4	patents teach, and patent performs all of the computations to
03:20PM	5	form the parity bits in one step; however, that one step is
03:20PM	6	much higher complexity than the two separate low complexity
03:20PM	7	steps in the Caltech patents.
03:20PM	8	Q And Broadcom tried to implement this direct encoder after
03:20PM	9	this lawsuit was filed?
03:20PM	10	A That's correct. It was relatively recently.
03:20PM	11	Q And do you have an opinion as to whether the direct
03:20PM	12	encoder uses Caltech's patents?
03:20PM	13	A The direct encoder does not use Caltech's patents.
03:20PM	14	Q And why doesn't the direct encoder meet the limitations of
03:20PM	15	Caltech's claims? Just step through it.
03:20PM	16	A Certainly. Well, that depends on the particular claim.
03:20PM	17	But if you look at -- at particular claims, one of the
03:20PM	18	reasons is that the first coder doesn't -- I'm sorry, the
03:20PM	19	direct encoder doesn't have a first and second coder. And
03:20PM	20	also, it just doesn't follow the irregular repetition,
03:21PM	21	scrambling, permutation, even as an LDGM step followed by an
03:21PM	22	accumulator.
03:21PM	23	So it doesn't have, for example, a first and second coder,
03:21PM	24	it's still a single coder.
03:21PM	25	Q Now, are there advantages to Caltech's patented technology

CERTIFICATE OF OFFICIAL REPORTER

COUNTY OF LOS ANGELES   )
)
STATE OF CALIFORNIA   )

             I, TERRI A. HOURIGAN, Federal Official Realtime

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the Central District of California, do hereby certify that

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the United States.

Date: January 17, 2020

                         /s/ TERRI A. HOURIGAN

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                         TERRI A. HOURIGAN, CSR NO. 3838, CCRR
                           Federal Official Court Reporter

UNITED STATES DISTRICT COURT